

# The Chemical Supply Chain: Lessons Learned from the Pandemic to Influence Strategy in 2021

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## Abstract

Governments, businesses, and people faced an unprecedented crisis in 2020 as they attempted to alleviate the far-reaching consequences caused by the coronavirus (also called COVID-19) pandemic. The indefinite halt of world travel had radically changed market demand and disrupted global supply chains.

The pandemic has affected and continues to impact different industry verticals differently; while food and medicine-related verticals continue with high priority and demand, other verticals have suffered from low sales and revenue. Although some countries have opened its borders, market demand is still less than pre-pandemic levels. As the global economy starts its recovery, companies will study the impact on their supply chains—from sourcing, to workforce, to supply chain resilience.

The white paper provides an in-depth perspective on the impact of COVID-19 on the chemical industry while highlighting first-hand experiences of some of our petrochemical customers. It further discusses the potential solutions and expertise that Maersk has to offer to mitigate the risks and losses of the industry as it moves forward on the path to recovery.

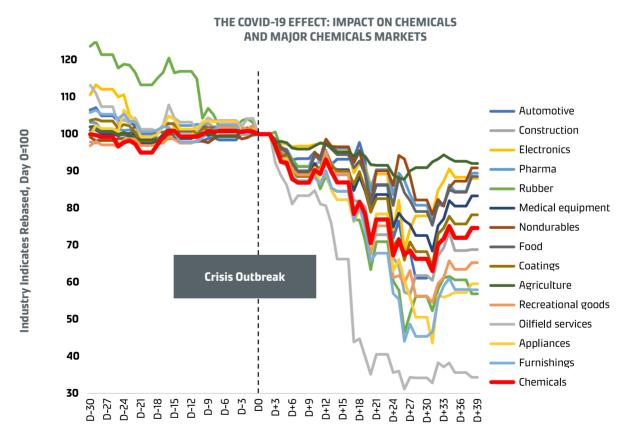


# Turmoil in the chemical industry

Statistics and numbers wouldn't suffice if one were to explain the turmoil in the chemical industry caused by the pandemic. COVID-19 has impacted demand, supply, inventory, and logistics, among other aspects of the business.

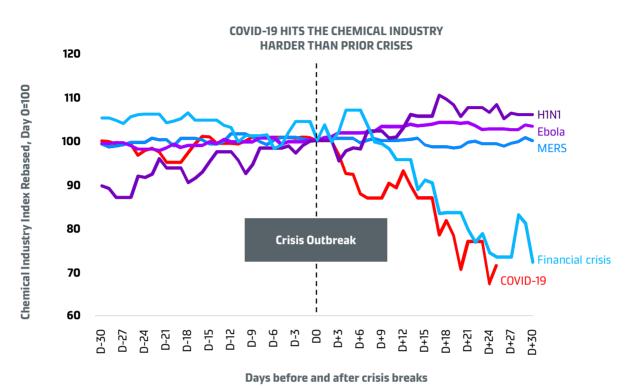
96% of manufactured goods contain products of the chemical industry.<sup>1</sup> It is responsible for manufacturing 70,000 different products out of raw materials, which have uses in the food, agriculture, transportation, healthcare, building and construction, and consumer goods industries, to name a few.<sup>2</sup> As chemical demand is a function of its customer industries' demand, the chemical industry has been affected in some sectors (like automobiles) and benefitted in other sectors (like medical equipment).

Accenture predicts that the global chemical GDP would contract by approximately 11% in 2020 due to the closure of many of its customer industries.<sup>2</sup> The graph below shows the impact of the pandemic on major chemical markets.



Source: Accenture Research based on analysis of industry indices sourced from Capital IQ. Index = 100 at the crisis date of outbreak (DO): COVID-19 D0 = Feb 21, 2020. Top vs bottom three most impacted industries.

Figure 1: COVID-19 effect on chemical markets



The impact of COVID-19 on the chemical industry has been far worse than previous global diseases like H1N1, Ebola, and MERS; the industry has suffered more than even the financial crisis of 2008, Accenture reports.

Source: Accenture Research based on analysis of chemical industry index sourced from Capital IQ. Index = 100 at the crises date of outbreak (DO). Dates are as follows: COVID-19 D0 = Feb 21, 2020; MERS D0 = May 20, 2015; Ebola D0 = Apr 10, 2014; H1N1 D0 = Apr 17, 2009; Financial crisis D0 = Sep 15, 2008.

Figure 2: Impact of global crises on chemical industry

The challenges the industry face include supply chain disruptions, low demand, tightening credit, and the health and safety of the workforce.

- The industry's dependency on China has adversely impacted its supply chains, leaving companies struggling to search for alternatives and workarounds. However, production in China and the Asia-Pacific region is back to normal after a brief slump.
- The bulk of the chemical industry's production operations being on-site renders the workforce vulnerable to the disease. Production in the European, North American, Middle Eastern, African, and South Asian regions have been impacted by labor shortages.
- Demand for chemicals required for essential goods like polymers, sanitizers, and PPE has sharply increased. On the other hand, demand for chemicals required in automobiles has plummeted.
- The disruption in supply chains has jeopardized the ability to acquire raw materials and to deliver finished products on time to its customers. Scheduled interruptions in the initial weeks of the pandemic have caused long delays; closure of international borders in Europe, the Middle East, and inter-state borders in many countries have played a role in the delay.
- Several companies have increased production to lower the existing inventory, along with moving their cargo closer to markets with flexibility.
- With all the uncertainty associated with the health crisis, accurate financial reporting is difficult. Several contingencies have to be accounted for; the magnitude of economic disruption and its impact on goodwill, assets, and liquidity can at best be guesstimated.

A study by GPCA reports that between January and April 2020, the OPEC crude oil price basket dropped by approximately 73%, and predicts that its price will remain less than US\$45 per barrel through 2023, given its weakened global demand.<sup>3</sup> The drop in oil prices affected the prices of petrochemical products, with a fall ranging from 7.1% to 67.9% (YOY as of April 2020) across different products, with naphthalene being the worst hit.<sup>3</sup>

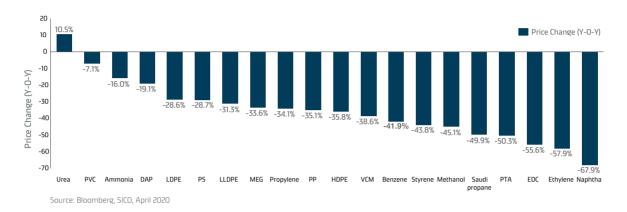
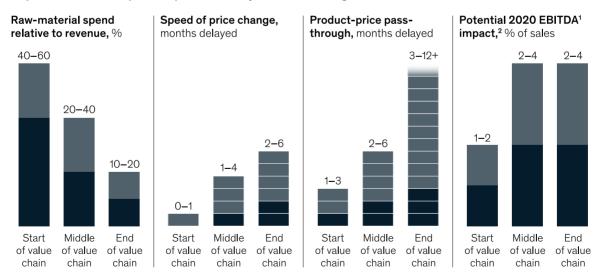


Figure 3: Price change (YOY as of April 2020) of petrochemical products

However, chemical companies could use the stark drop in crude oil prices to their advantage. The deteriorating revenue of chemical companies could be offset by low crude oil-based raw-material purchase costs. Figure 4 shows that a 50% drop in oil price could generate 2-4 p.p. in EBITDA for companies that spend 10-20% of their revenues on raw materials.<sup>4</sup>

#### The impact of the oil-price drop varies along the chemicals value chain.



#### Impact of a 50% drop in the price of oil, by value-chain segment

<sup>1</sup>Earnings before interest, taxes, depreciation, and amortization. <sup>2</sup>Excluding inventory effects.

#### McKinsey & Company

Figure 4: Impact of oil price drop on EBITDA

## COVID-19, the black swan

A catastrophic event that took the world by surprise, COVID-19 has wreaked havoc across global supply chains. The pandemic, labeled a "black swan" event, started a chain reaction in the geopolitical, economic, and technological spheres, resulting in trade restrictions, demand shocks, price volatility, border delays, currency fluctuations, ICT disruptions, and infrastructure failures.

Increased Costs	Uncertainties of Demand a	and Supply
Labor Costs	K Vendor Low Capacity	Quarantining of Vessels
Adjacent Costs	Raw Material Shortages	Infrastructure Closures Due to Lockdown
Logistics Costs	Labor Shortages	Volatility Between Over Demand and Over Supply
Compliance Costs	Air Freight Impact	Increased Demand for Forward Storage
	Road to Ocean & Air to Ocean Conversion	

Figure 5 shows the stages of the crisis management journey, namely, response, recovery, restoration, and prevention. The ever-changing effects of the pandemic have led to different industries being stuck in different stages of handling the crisis; many are still in the response or the recovery stage.

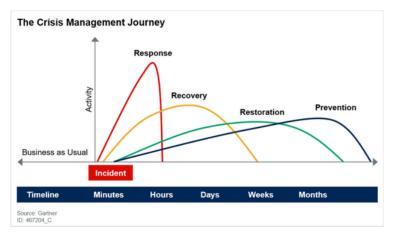


Figure 5: Stages of crisis management

While the chemical industry has suffered far less compared to other sectors (the chemical production output was down by only 3.1% in March 2020), the estimation for FY2020 is contingent on the length of the crisis and industry sub-verticals.

The scenario for the next six months suggests that automobile production will go down by 10%; the impact on consumer chemicals and agriculture will be negligible, whereas pharmaceuticals and health chemicals will witness a surge in demand.

With a vaccine still in its infancy, the path to recovery seems uncertain. The chemical industry's recovery will ultimately depend on the recovery of the verticals it caters to. However, the coronavirus, coupled with climate change will bring about changes in the industry in the form of supply chain resilience, acceleration of digitization, increased agility and customer focus, behavioral changes in the market, involvement of governments, and rebalancing international trade.

# What do our customers say?

As the pandemic stretched its legs, we interviewed the heads of logistics, distribution managers, and other senior management personnel of several petrochemical companies in the UAE and Saudi Arabia to better understand their predicament, how they weathered the initial turbulence, their outlook on the future of business, and how we, at Maersk, could solve their issues. Their responses shed light onto several themes that emerged as a result of the pandemic.

# COVID-19 tested chemical companies' supply chain resilience

#### Importance of supply chain partners

It is important to have dependable supply chain partners who provide business and moral support in these trying times. All the interviewees from our study emphasized this on several occasions.

Such partners come equipped with flexibility, care, and empathy needed to weather the turbulence. A good supply chain partner would be able to understand the delay in shipments, unfulfilled orders, and other challenges that companies face during transit.



If you have professional and long-term partners who understand this business, you will not feel that you are in a crisis and the numbers prove that.

"Flexibility" and "agility" were two words that were frequently used when the interviewees were asked about their supply chain partners. COVID-19 highlighted the need to consider agility, flexibility, preparedness, and approach to a crisis as parameters when choosing the right kind of supply chain partner. Evidence from the pandemic suggested that going forward, chemical companies must partner with a supplier that focuses more on the product than the price. "Market intelligence is the most important element in making a good supplier or provider," said a senior executive of a private chemical manufacturing organization.

Constant communication and maintaining business relationships goes a long way in building trust and collaboration between partners.



# Juggling with closure of borders, government rules, and scheduled interruptions

Closing of borders and nationwide lockdowns implemented to curb the spread of the contagious disease adversely impacted the supply chain. Different policies in different regions made access to remote areas difficult.

"COVID-19 closed land borders and shifted much of land transport to ocean freight. Everyone faced low import clearance, this effected capacity in cargo at ports as customs held cargo," said the interviewees of a joint venture. Low import clearance, backlog, space shortage, and reduced capacity with lines at ports were some of the issues they faced that contributed to the overall pandemic-infused inefficiency. One of the biggest challenges for a private player came from government policies of locking down offices, curfew enforcement, and stopping land transport movements. A major chemical company lamented that it had to stop all of its trucks (essential for reaching remote locations) and use railways instead, which led to congestion and delays in delivery of goods.

A Saudi Arabian company had to bear the cost of delays and D&D charges to ensure the continuance of their business relationship. Several companies were hit hard because of spot rates due to re-routing.

## Delays in shipments, closure of ports, increased transit time, inland transportation issues, scheduled interruptions, and the uncertainty surrounding different lockdowns across countries were some of the pain points for many businesses.

Lead-times of businesses were severely affected by the pandemic. "Blank sailings, slowdown challenges, and increased lead-times have hurt us in terms of price," said a manager of a jointly owned company. The closing down of factories for the holiday season results in low demand for space on shipping vessels. Scheduled interruptions, a common tool used by shipping companies, help in cutting costs and keeping rates in check. However, the coronavirus outbreak has exacerbated the situation. A study by Sea Intelligence estimates that scheduled interruptions and the drop in global demand would cost shipping companies a mammoth US\$1.9 billion.<sup>5</sup>

Low oil prices and delay in cargo arrival led to renegotiating of prices, which impacted their financial statements. "While Maersk focused on enabling our customers' supply chains to flow, blanked sailings were inevitable due to the substantially reduced demand and change in trade flows," rued Silvia Ding, our Senior Vice President and Global Head of Ocean Product and Network. "At the same time, Maersk stayed very agile to adjust to changes in short-term demand, although there are times when the adjustments are insufficient in the case of sudden changes in demands, no availability of ships within the planning window, or other infrastructural bottlenecks. When we execute blank sailings, we always try to minimize the disruption and impact on our customers by offering alternate solutions."

### Managing inventory amidst fluctuating demand

Unprecedented events like the coronavirus crisis translate to unprecedented, fluctuating demand. During this time, forecasting market demand and conditions is difficult for chemical companies.

## The economy of demand has changed.

Demand shifted to different regions due to which one of the largest chemical companies had to change its production forecast. The different curfews and lockdown situations in different countries added to the difficulty of forecasting.

Strong business relations and long-term contracts with customers helped the companies navigate the drastic changes in market demand and supply.

A joint venture chemical producer uses long-term agreements for 70% of its total production, which helped in



protecting them from market disruption. Having a diverse customer base ensured they maintained a continuous supply. Another joint venture had most of its production under long-term agreements too; a global logistics network helped them forecast market conditions and balance the demand and supply situation.

A private chemical company notified its customers of delays and worked with them on demurrage and storage fees. The health crisis led various departments of another private company to engage with new stakeholders as they navigated the pandemic, strengthening the company's relationship with its customers.

You would expect that a pandemic with adverse impacts on global demand and supply would naturally have an effect on inventory. However, surprisingly, our respondents did not have major inventory-related issues.

## Long-term contractual agreements enabled several manufacturers to keep a low inventory and continuous supply of goods.

"For 2020, 73% of our products are secured by long-term agreements, versus around 30% in the past," explained the interviewees of a private petrochemical company. A few of our customers, which included both private and state-owned chemical producers, made transactions with spot rates to handle capacity issues and for greater flexibility and protection.

However, one joint venture chemical producer took the opposite approach—maintaining a high inventory allowed them to meet the fluctuating demand.

## A digital push for sustenance and future growth

### Paperless/digital documentation

Intercontinental shipments sailed on the backbone of paper documents that were manually drafted. The pandemic shed light on the inflexible, time-consuming, and inconvenient nature of paper documents and was a catalyst in the shift towards a paperless, digital document-filled future.

For a private chemical company, all documents were submitted physically before the pandemic, and now those documents went electronic and were submitted online.

In light of the crisis, many suppliers started accepting digital documents and waived certain document-related requirements. "90% of customers have waived the requirement of certificate of origin. Some explored paperless solutions," said a manager of a joint venture chemical manufacturing company

## The pandemic-induced challenges revolving around manual documentation brought about a general consensus to look into the digitization of documents, among those who had not gone paperless yet.

Going paperless was a blessing in disguise for many chemical companies. When asked about documentation, interviewees from a joint venture said, "BRQ was conducted entirely online...all documentation, negotiation, and communication was done remotely. Online billing was effectively utilized; we hope others will learn from this."



### Importance of investment in IT

Learning from the challenges faced due to the pandemic, companies have realized the importance of digitization and going paperless. The promise of speed, convenience, and efficiency of digital solutions has made companies more willing to invest in IT and automation across their branches.

"There is a strong need for digitization...cyber-security is a priority," said a logistics executive of a private company. A private chemical company established a team to figure out how to move forward with digitization, as they realized it could no longer be ignored.

Digitization was part of a joint venture chemical producer's long-term strategy, and they claimed to have invested heavily in IT while looking toward automation in the future.

"IMEA still has lot of scope for digitization compared to the rest of the world. Lots of automation on our company's front," explained a transport executive of a joint venture company. For them, digitization was desirable to improve the accuracy of work, although cyber-attacks were a major concern.

"We are hoping to improve digitization from the shipping perspective," wished the interviewees of another joint venture manufacturing organization.

# *COVID-19 tested the level of digitization across all companies.*

Over the course of the pandemic, the importance of digitization became clearer. However, digitization is efficient only when all the parties associated with the shipping process are integrated on one platform, which is what one of the respondents desired.

### Digitally mature companies

Digitally mature companies could respond faster to the drastic changes brought about by the pandemic. Their digital preparedness provided them with greater flexibility and allowed them to make quicker decisions.

One such respondent from our interview had been



equipped with the required facilities and tools such as remote workstations, virtual conference rooms, and software to ease its employees into the new working conditions.

An executive in-charge of transport at a private chemical company was optimistic about the digital transformation occurring because of the pandemic, and said, "We're strongly inclined toward digitization...a lot of digitization initiatives were already in place, but they were fast-tracked during COVID-19."

Online stores like Amazon underwent a huge jump in demand as worldwide lockdowns forced brick-andmortar stores to shut shop. Before the pandemic, Amazon accounted for 4% of total retail sales in the US, however, the implications of the pandemic will take e-commerce to new heights, accounting for 25% of total retail sales by 2025, UBS predicts.<sup>6</sup> Moreover, its US\$4 billion investment in protection against the virus and efforts to create a "vaccinated supply chain" will hurt the competition as the pandemic progresses.<sup>5</sup> A study by IBM shows that the shift

towards e-commerce has been accelerated by five years due to the pandemic. E-commerce is set to grow by almost 20% in 2020.<sup>7</sup>

As Amazon takes on B2B supply chains, tech-savvy chemical companies can look toward reducing their dependency on a single source or country and integrate digital platforms in their supply chains. A blockchain-powered platform like TradeLens can ensure seamless, end-to-end shipments, providing companies real-time information and tracking facilities of their cargo. Such digital platforms not only save cost but also increase the efficiency of the supply chain.

## Becoming agile benefitted employees and strengthened customer relationships

## Proactive communication with employees and customers

News revolving around an ongoing crisis can be overwhelming, and with a barrage of incoming news and uncertainty around the pandemic, it was necessary that companies communicate proactively with their employees and customers.

# It's about agility and accepting the situation.

One of the respondents, a joint venture company, set up a pandemic team, updating its employees across the globe on the developments and protocols related to COVID-19. At another joint venture, the pandemic team provided daily updates and debunked any rumors that cropped up. The management at this company took proactive decisions and ensured that the new guidelines were being followed. The decision to stay safe at home and spend time with their families left its employees optimistic and elevated their spirits.

The beginning of the pandemic saw many companies adopting a reactive approach to tackle the crisis. Companies realized that being proactive in dealing with suppliers and customers was the way to go. One of the major lessons learnt from the pandemic was effective communication through teams dedicated toward updates on the pandemic and providing quick responses to its customers. At Maersk, incoming customer calls were picked up within 30 seconds, while there was a 15% increase in outgoing proactive calls.

# New ways of communication in remote working conditions

The pandemic has forced upon new ways of working, with working from home becoming the new normal for the foreseeable future. A manager at a joint venture highlighted the region's work culture saying, "Talking about the work-from-home conditions, people were ready for it, but the company and culture weren't," the manager at a joint venture said. "



In an effort to maintain work-life balance, the management at a private chemical producer set guidelines and flexible timings for virtual meetings. While some took the change in their stride and were happy with the increased flexibility and family time, some had a difficult time adjusting with the remote working conditions, while others had mixed feelings about the whole situation. Despite the challenges faced from the new workfrom-home policies, employees across companies eased into the new way of working when they realized that the coronavirus is here for the long run.

"...as the pandemic progressed, employees became more organized in processing the workload between working hours and personal commitment," said the respondents representing a large petrochemical company.

While the employees at companies faced a few bumps in the form of packed calendars, self-discipline, and a new meaning to work-life balance', they eventually accustomed themselves to remote working methods.

"We used to do the bulk of our work in the office and a little at home. Now, the bulk is spread throughout the day; everyone has personal working hour preferences, which is confusing, but we've learnt to work with it and the business goes on," said the procurement managers at a joint venture.

A senior executive of another joint venture said, "The team was slightly lost at the beginning, but they picked it up afterwards...one-to-one sessions were held [virtually] to keep the [employees'] spirit up." Employee morale assumed significant importance during the initial days of the pandemic. It was crucial for the management to uphold team spirit and ensure that the entire workforce was in it together.

With face-to-face interactions taking a backseat now and in the near future, companies tried adopting video conferencing as a substitute to personal meetings.

### Work culture differences

There exist cultural differences across geographies—in lifestyle, social interactions, building relationships, and workflow. Sometimes, the work culture differs between companies in the same region.

#### In the Middle East, personal interaction is imbibed in the region's culture.

The Western culture dictates avoiding close relationships with customers and maintaining only a formal one. On the contrary, the Middle East believes in forming personal bonds to build strong business relationships. Face-to-face interactions are responsible for building mutual trust in the region. Patience and flexibility are key aspects of the Middle Eastern business etiquette, which makes for a relaxed pace of business interactions compared to the West.

An executive in charge of logistics for a private chemical manufacturer said, "You can digitize everything, but personal interaction is important...we are an interactive company." They went on to say that the company relied on in-person checks and in-person customer visits for much of their relationship building.

### How Maersk helps the chemical industry

An unprecedented crisis brought with it unprecedented challenges across industries. While the vagary of demand is a regular challenge for companies, rampant disruption of global supply chains have made logistics messy.

Maersk, an integrated transport and logistics company, is led by domain experts who understand the unique standards, requirements, and challenges of the industry. We leverage this knowledge along with local expertise, sophisticated computing, and global reach to ensure personal attention so that we can provide tailor-made supply chain solutions just for you.

Maersk's digital platforms give clear visibility of vessel availability and any changes that may impact your shipments. With booking, payment and tracking functionality all in one place, it offers a simple way to stay in control.

#### Maersk's chemical industry solutions

Efficient supply chain management is the need of the hour. A sudden fall in demand in some sectors and the uncertainty about the opening up of markets calls for flexible ocean and storage solutions. The global crisis has also disrupted ocean networks and the flow of equipment, which have hindered the ability to export goods.

"Having the right cargo in the right place at the right time is crucial in this industry, flexibility is key to ensure manufacturers can adapt to fluctuations the market brings. Production uptime and asset utilization are key for the chemicals industry, having a logistics partner who can provide flexible products can mitigate these risks to production," explained Henrik Wretensjoe, our Global Vertical Head, Chemicals.

The table below shows how some of your issues can be alleviated by our flexible solutions at Maersk. To learn more about our offerings, visit www.maersk.com/industry-sectors/chemicals.

PAIN POINTS	KEY NEEDS	MAERSK SOLUTIONS
<ul> <li>Slower than expected demand</li> <li>Uncertainty about strength of end markets</li> <li>Demand shocks when markets open up</li> </ul>	<ul><li>Flexible ocean solutions</li><li>Storage solutions</li></ul>	<ul> <li>Maersk Flex Hub</li> <li>Inland depots</li> <li>Ocean products like Maersk Contract, Maersk Spot, Maersk ECO Delivery</li> </ul>
<ul> <li>Disrupted ocean networks and equipment flows causing hinderance to export ability</li> </ul>	<ul> <li>Ocean space, equipment, and services</li> <li>Origin storage</li> </ul>	<ul> <li>Inland depots</li> <li>Intercontinental rail</li> <li>Ocean products</li> <li>Extraordinary equipment repositioning programs</li> </ul>



#### Stories of success

#### Ensuring business continuity

To help our customers, we at Maersk, aimed to provide accessibility, flexibility, and reliability in all our endeavors. Our customer service team was engaging with our customers more than ever, analyzing and solving their problems.

The pandemic saw an increase in the customer service accessibility, which stayed above 97%, an all-time high. Our customer service team was on their toes, providing round-the-clock support for our customers. Customer-centricity was our top priority as the pandemic progressed.

"The most important task when the pandemic intensified and offices were closed was to have a seamless transition for our customers and ensure that we were still available to keep their supply chains running," said a representative of the Customer Service team.

Maintaining strong supplier relations, constant communication between our customers and

suppliers, monitoring of border conditions, non-stop work by ground operators, and consistent document flow helped us provide smooth service to and clarification to our customers during the turbulent times.

- Drop-off boxes and cashless counters were introduced, and bill of lading (BL) charges were waived to reduce counter walk-ins, avoid cash handling, and ensure contactless operations.
- To keep our customers in the loop, we uploaded online payment, electronic BL process, and other processes on our website, maersk.com, and updated customers of contingencies.
- A courier pick-up/delivery system was established for urgent cargo.

"Thank you for all the diligent and attentive work you are providing us with across the globe. During these uncertain times, navigating unchartered waters can be exceedingly difficult for most supply chains. Without your support and global teams, it certainly would not have been possible to maintain our current business flow during these turbulent and challenging times."

A Maersk customer's testimonial



Our customers were pleased with our comprehensive, weekly, coronavirus updates. One of our customers spoke highly of our services, saying, "Believe more than anything, among all carriers, Maersk has the best ability to be able to communicate business continuity."

#### Transforming supply chains through digitization

The petrochemical supply chain faces challenges in both of its upstream functions (sourcing and managing raw materials) and downstream functions (delivering final products to customers).

#### **Quality control**

Upstream companies uphold a high standard of safety and quality control while dealing with volatile, corrosive, and toxic substances. Any deviation in the quality detected downstream, the source needs to be traced quickly by upstream companies to determine the weak link in the chain.

#### **Siloed operations**

Data crucial for supply chain planning related to price, raw materials, customers, and logistics for upstream and downstream companies often lack an integrated, single-view dashboard as they are scattered across different systems.

#### **Fluctuating prices**

Downstream companies must have their finger on price fluctuations across raw material and product inventory, should they maintain a healthy bottom line. Vagaries in demand, supply, and market conditions increase costs for these companies.

#### Industry regulations and requirements

Each country has its own set of industry and safety rules and regulations, for which both the sender and receiver of shipments must have adequate paperwork. In case of mishandling or a mishap during transit, the documents must stick with the cargo so that the associated parties can access vital information and take necessary actions.

Digitization of the supply chain improves transparency and visibility over the global movement of goods, helps in identifying price variations and its potential impact on supply chain through disruption indicators, and increases collaboration and output efficiency. As a result, the flow of goods across all modes of transportation is monitored, inventory is kept low, and lead-times are reduced. Predictive planning identifies risks and helps in taking actions to mitigate them. Increased collaboration reduces supply chain friction, increases port, packaging, and terminal flexibility, and eliminates waste points in the chain.

TradeLens, a blockchain-powered, open industry platform jointly developed by IBM and Maersk has helped major players in the petrochemical industry. The comprehensive, auditable, end-to-end system provides visibility into real-time information to optimize procurement processes. IBM reports savings of 24% in supplier costs via industry-standard digital procurement tools. The centralized platform allows companies to streamline their logistics operations. A study in the International Journal of Global Logistics & Supply Chain Management shows that digitization of the supply chain can save up to 20% on revenues from supply chain costs. An Accenture study estimates savings to the tune of US\$2.7 trillion by 2020 through the digital transformation of supply chains.

A robust, digitized, end-to-end supply chain in the petrochemical industry can thus increase efficiency, mitigate unforeseen risks, and ensure a continuous supply of raw materials and finished goods across the world.



#### In closing

Like other industries, the pandemic-induced disruption has impacted several aspects of the chemical industry. The immediate challenge remains to keep their workforce safe, while maintaining the same levels of operation. In the medium term, the overall fall in global demand will affect their business.

Operationally, it is important to study redundancies, supply chain risks, and inventory, and devise contingency plans. Financially, prioritizing investments, safeguarding liquidity, and anticipating disruptions bear equal weightage in countering the impact. During this period, communicating with the workforce, customers, suppliers, and stakeholders by leveraging digital technologies is key to maintaining relationships and boosting morale.

COVID-19 has brought with it a sense of urgency and a set of unique challenges as we head into 2021. It is crucial that the chemical industry implements program management capabilities to quickly respond to the crisis. While ocean freight has always been Maersk's primary focus, our vision to become a global integrator of container logistics that simplifies your supply chains has pushed us to delve beyond ocean transport, taking a holistic approach to provide tailored products and services to ensure a seamless supply chain.

To know more about Maersk and how we can help, visit www.maersk.com/industry-sectors/chemicals.

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